

IN THE CLAIMS

Please reconsider the claims as follows:

1. (previously presented): A hardware upgrade for a set top terminal for use with a television program delivery system with menu selection of programs, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus, the hardware upgrade comprising:
 - an interface to the set top terminal for receiving and processing subscriber input;
 - a modem connected to the interface for communicating with one or more headends, wherein the set top terminal receives television program signals based on the subscriber input; and
 - a microprocessor connected between the interface and the modem,wherein the hardware upgrade is a card insertable into the set top terminal to add a data modulation and demodulation function to the set top terminal such that data may be retrieved from the one or more headends and stored in local storage wherein the data comprising information from an interactive service for accessing an on-line database thereby allowing actual transactions using two-way communications over the modem with the interactive service via submenus, and the interface to the terminal comprises:
 - interactive software stored in memory of said hardware upgrade to provide enhanced functional capabilities for the set top terminal; and
 - processing circuitry to process said subscriber inputs associated with said interactive software.
2. (canceled).
3. (previously presented): The hardware upgrade of claim 1 further comprising
 - memory connected to the microprocessor of the hardware upgrade.

4. (previously presented): The hardware upgrade of claim 1 wherein the modem is capable of communicating with the interactive service.

5. (original): The hardware upgrade of claim 4 wherein the interactive service is outside of the television program delivery system.

6. (original): The hardware upgrade of claim 4 wherein the interactive service is selected from a group consisting of home shopping, airline reservations, news, financial information, classified advertisements, home banking, and interactive teletext.

7. (previously presented): The hardware upgrade of claim 1 wherein the modem is capable of communicating with the on-line database.

8. (original): The hardware upgrade of claim 7 wherein the on-line database is outside of the television program delivery system.

9. (original): The hardware upgrade of claim 7 wherein the on-line database contains data concerning one or more applications selected from a group consisting of home shopping, airline reservations, news, financial information, classified advertisements, home banking, and interactive teletext.

Claims 10-13. (canceled).

14. (previously presented): A set top terminal for use with a television program delivery system with menu selection of programs, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus and comprising:

a receiver adapted to receive programs; and

a first hardware upgrade comprising:

an interface to the set top terminal for receiving and processing subscriber input;

a modem connected to the interface for communicating with one or more headends, wherein the set top terminal receives television program signals based on the subscriber input; and

a microprocessor connected between the interface and the modem, wherein the first hardware upgrade is a card inserted into the set top terminal to add a data modulation and demodulation function to the set top terminal such that data may be retrieved from the one or more headends and stored in a local storage and the terminal has an expansion card slot,

wherein the interface comprises at least one card connector adapted for use with the expansion card slot, and

wherein the data comprising information from an interactive service for accessing an on-line database thereby allowing actual transactions using two-way communications over the modem with the interactive service via submenus.

Claims 15-17. (canceled).

18. (original): The terminal of claim 14 wherein the terminal is an HDTV terminal.

19. (original): The terminal of claim 14 further comprising:
one or more additional hardware upgrades connected to the terminal.

Claims 20-22. (canceled).

23. (original): The terminal of claim 19 wherein at least one of the one or more additional hardware upgrades is selected from the group consisting of an audio program reception hardware upgrade, an interactive hardware upgrade that receives interactive subscriber input and produces interactive output, and a storage hardware upgrade.

24. (previously presented) A system comprising:

a television program delivery system adapted to deliver television program signals; and

a set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus and comprising:

a receiver adapted to receive at least some of the television program signals; and

a hardware upgrade comprising:

an interface to the set top terminal for receiving and processing subscriber input;

a modem connected to the interface for communicating with one or more headends, wherein the set top terminal receives the television program signals based on the subscriber input; and

a microprocessor connected between the interface and the modem,

wherein the hardware upgrade is a card inserted into the set top terminal to add a data modulation and demodulation function to the set top terminal such that data may be retrieved from the one or more headends and stored in a local storage wherein the data comprising information from an interactive service for accessing an on-line database thereby allowing actual transactions using two-way communications over the modem with the interactive service via submenus, and

wherein the television program delivery system is a cable television program delivery system comprises an operations center, the operations center transmitting one or more of the programs to the terminal wherein a particular one of the one or more headends transmitting one or more of the programs to the terminal.

Claims 25-27. (canceled).

28. (original): The system of claim 24 wherein the television program delivery system is a satellite broadcast system.

29. (original): The system of claim 24 wherein the terminal is an HDTV terminal.

30. (currently amended): A television terminal having a microprocessor and microprocessor instructions for prompting generation of menus, the television terminal comprising:

a television program receiver;

an interface to the television terminal for receiving and processing subscriber input;

a modem for communicating with one or more headends, wherein the television terminal receives television program signals based on the subscriber input; and

a television terminal microprocessor connected between the interface and the modem;

a hardware upgrade for upgrading the television terminal, wherein said hardware upgrade comprises a hardware upgrade microprocessor for processing a subscriber's interactive input received from the television terminal microprocessor via the interface to the hardware upgrade microprocessor and generating a response to said subscriber's interactive input to be sent back from the hardware upgrade microprocessor back to the television terminal microprocessor for display.

wherein the modem downloads data from the one or more headends to a local storage, the modem for communicating with an interactive service and an on-line database wherein the interactive service and the on-line database are outside of the television program delivery system and the data comprising information from the interactive service for accessing the on-line database thereby allowing actual transactions using two-way communications over the modem with the interactive service via submenus; and
an output connected to the receiver and the modem, wherein the output

accepts the television program signals from the receiver, ~~and~~ data signals from the modem and the response from the hardware upgrade microprocessor.

31. (original): The television terminal of claim 30 wherein the output is a video display.

32. (original): The television terminal of claim 30 wherein the output is a connector port.

33. (canceled)

34. (previously presented): The television terminal of claim 30 further comprising memory connected to the microprocessor of the hardware upgrade.

Claims 35-36(canceled)

37. (currently amended): The television terminal of claim 30 wherein the interactive service is selected from a group consisting of home shopping, airline reservations, news, financial information, classified advertisements, home banking[.], and interactive teletext.

Claims 38-39(canceled)

40. (previously presented): The television terminal of claim 30 wherein the on-line database contains data concerning one or more applications selected from a group consisting of home shopping, airline reservations, news, financial information, classified advertisements, home banking, and interactive teletext.

41. (original): The television terminal of claim 30 wherein the television terminal is an HDTV terminal.

42. (previously presented): A method for delivering television programs through a television program delivery system with menu selection of programs, comprising:

receiving a television program from one or more headends;

receiving subscriber input through an interface within a set top terminal, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus;

communicating through a modem with the one or more headends using a hardware upgrade inserted into the set top terminal, the hardware upgrade adding a data modulation and demodulation function to the set top terminal, and the communicating step comprising:

transmitting data based on the subscriber input;

receiving data from the one or more headends; and

downloading data from the one or more headends to a local

storage using the hardware upgrade and the modem;

displaying the television program and/or information based on the received data;

providing a second upgrade to said set top terminal for storing digital data on a storage device, wherein the received data comprises information concerning the television program, and

monitoring the information concerning the television program; and

retrieving the stored digital data, in response to the monitoring step wherein the data comprising information from an interactive service for accessing an on-line database thereby allowing actual transactions using two-way communications over the modem with the interactive service via submenus.

43. (original): The method of claim 42 wherein the received data comprises information concerning the television program.

44. (canceled).

45. (original): The method of claim 42 wherein the communicating step further

comprises:

communicating with at least one interactive service.

46. (original): The method of claim 45 wherein the interactive service is outside of the television program delivery system.

47. (original): The method of claim 45 wherein the interactive service is selected from a group consisting of home shopping, airline reservations, news, financial information classified advertisements, home banking, and interactive teletext.

48. (original): The method of claim 42 wherein the communicating step further comprises:

communicating with at least one on-line database.

49. (original): The method of claim 48 wherein the on-line database is outside of the television program delivery system.

50. (original): The method of claim 48 wherein the on-line database contains data related to one or more applications selected from a group consisting of home shopping, airline reservations, news, financial information, classified advertisements, home banking, and interactive teletext.

51. (canceled)

52. (previously presented): The method of claim 42 wherein the storage device is a disc.

53. (original): The method of claim 52 wherein the disc is a CD.

54. (original): The method of claim 53 wherein the CD is a CD-ROM.

55. (previously presented): The method of claim 42 further comprising:
processing the digital data stored on the storage device.

56. (previously presented): The method of claim 42 wherein the stored digital data concerns one or more applications selected from a group consisting of games, education, encyclopedias, reference, and economics.

57. (canceled)

58. (original): The method of claim 42 further comprising:
remotely receiving the interactive subscriber input.

59. (original): The method of claim 42 further comprising:
generating a menu on a television, wherein the subscriber input comprises menu selections.

60. (previously presented) Apparatus for upgrading a capability of a set top terminal (STT), said STT having circuitry adapted to receive a data stream including a plurality of compressed television program signals, decompress a compressed program signal and provide a corresponding output signal adapted for use by a display device, said apparatus comprising:

a STT interface, for enabling communication with said STT;

a modem for providing on-line communications with a content provider, said modem being a card insertable into said STT to add a data modulation and demodulation function to said STT, wherein said STT includes a first processor for controlling said circuitry and wherein the apparatus upgrades the STT for accessing an on-line database thereby allowing actual transactions using two-way communications over the modem with an interactive service via submenus, and

an upgrade processor, for communicating with said first processor via said STT interface, said upgrade processor controlling said upgrade modem.

61. (previously presented) The apparatus of claim 60, wherein:
said on-line communications includes content other than said television program signals.

62. (previously presented) The apparatus of claim 61, wherein:
said modem upgrade feature of said STT downloads data from one or more headends to a local storage.

63. (previously presented) The apparatus of claim 60, further comprising:
a microprocessor connected between the interface and the modem.

64. (previously presented) The apparatus of claim 60, further comprising:
a tuner, for selecting a data stream including a plurality of encrypted data streams;

a demodulator, for demodulating said selected data stream to produce a demodulated data stream; and

a demultiplexer, for extracting an encrypted data stream from said demodulated data stream, said encrypted data stream being coupled to an upgrade decryption module.

65. (canceled)